LEAD BASED PAINT ASSESSMENT

21Pb17005

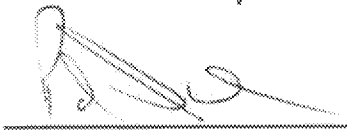
Prepared for:

Ex. 6 Personal Privacy (PP)

Ex. 6 Personal Privacy (PP) Bridge Street
Clarksburg, West Virginia 25301
304-266-7089

Date of Assessment
April 8, 2021

Prepared By:



Paul Ice
7320120009

WEST VIRGINIA Department of Health & Human Resources
BUREAU FOR PUBLIC HEALTH

Radiation, Toxics and Indoor Air Division
350 Capitol Street, Charleston, WV 25301
304-558-2981

STATE OF WEST VIRGINIA
DEPARTMENT OF HEALTH AND HUMAN RESOURCES
Bureau for Public Health
Office of Environmental Health Services

Bill J. Crouch
Cabinet Secretary

Ayne Amjad, MD, MPH
Commissioner & State Health Officer

June 6, 2021

Ex. 6 Personal Privacy (PP)
Bridge Street
Clarksburg, West Virginia 25301

Re: Ex. 6 Personal Privacy (PP)
21Pb17005

Dear Ms. Stout:

The Office of Maternal, Child and Family Health contacted the Office of Environmental Health Services and requested an Environmental Lead Assessment be conducted at Ex. 6 Personal Privacy (PP) home in Clarksburg, West Virginia.

The following report provides my findings, building background, testing conducted, test results and recommendations. If you have any questions concerning this report, please contact me at this office.

Best regards,

Paul D. Ice
Environmental Resource Specialist III
Radiation, Toxics and Indoor Air Division

350 Capitol Street, Room 313
Charleston, West Virginia 25301-3713
Telephone: (304) 558-2981

Summary of Findings:

On April 8, 2021, The Office of Environmental Health Services Lead Program conducted an Environmental Lead Assessment of the residence at [redacted] Bridge Street, Clarksburg, West Virginia, to identify sources of environmental lead. Sadie's mother was present during the assessment.

A walk-through of the residence was conducted prior to the assessment in order to identify testing combinations and select locations for sampling. *(Note: Testing combination is a term referring to a specific component and its underlying substrate in a room.)*

General housekeeping in the residence was good; however, extra attention should be given to areas that tested **positive** for lead. The interior of the home has drywall walls with some walls having wallpaper. The outside of the home has wood siding with a tin metal roof. No remodeling has occurred inside the home. There is some peeling and flaking paint inside the home on window trims and outside the home on the porch.

The family uses public tap water for drinking and cooking. Household furniture is wood, metal and upholstery, or some combination thereof, and appears to be lead-safe. The home is cooled with window air conditioners and heated with forced air gas heat. Play areas inside the home include the living room and bedroom, while outside the home is the back yard. The father works in the construction industry as a laborer and may contribute to bring home contamination.

Background:

The subject property was built around 1920 and is located in an urban setting with homes of similar age. There is an industrial property across the street from the home. The family has lived in the home for four (4) years. The child does not spend any regular time at another home built before 1978. The child has a sibling that has tested above 5 mcg/dl of blood in the past.

The inspection protocol was in accordance with the *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing,* as revised July 2012, including supplementary updates and all other applicable federal and state regulations. The following report provides my findings, test results and recommendations.

Environmental Observations & Findings:

Testing:

A lead-based paint assessment is a surface-by-surface investigation to determine the presence of lead-based paint and the provision of a report explaining the results of the investigation. The assessment conducted was **NOT** a lead risk assessment.

Testing was performed using the Niton Corporation's model XL-300A (Serial#103510) x-ray fluorescence (XRF) analyzer. An XRF reading of < (less than) 1.0 mg/cm^2 (milligrams per square centimeter) is considered "negative" and indicates that only a "trace" amount of

environmental lead may be present, but does **NOT** pose an environmental lead hazard. This XRF is operated in the standard test mode using the rules and procedures found in the Performance Characteristic Sheet (Edition #1) for the Niton Corporation model XL-300A. This instrument is not substrate dependent according to that performance characteristic sheet. Therefore, no substrate corrections were required during this inspection. The Niton XL-300A is a hand-held portable lead detector, designed to make accurate, non-destructive measurement of lead concentrations.

The XRF was calibrated prior to use and at the end of the testing or every four hours whichever came first. All calibrations were conducted on a 1.04 ± 0.06 mg/cm^2 Orange SRM 2573 paint film. All calibrations are noted on the x-ray fluorescence data sheets.

The results of the testing revealed **Four** of the XRF readings obtained indicate the presence of environmental lead in or around your house.

Attached is a printout of all XRF readings and their locations. Calibration readings are taken to ensure that the XRF is working properly and are not to be construed to indicate the presence of lead-based paint in the home.

A room equivalent is an identifiable part of a building, such as a room, exterior sides, or an exterior area. Hallways, stairways and exterior areas are all examples of room equivalents. Walls are identified as A, B, C and D. The A in each room corresponds with the wall on which the main entrance of the building is located. The remaining walls are located in order proceeding clockwise from the A wall. Each room equivalent is made up of components. For example, components in a room are the ceiling, floor, walls, a door and its jamb and casing, the window sash, casing or apron. The substrate is the material underneath the paint. Many substrates exist; however, HUD Final Guidelines recommend classifying substrates into one of six (6) types: brick, concrete, drywall, metal, plaster and wood. These substrate types are intended to include a broad range of materials.

If the true substrate is not one of the six (6) types, the substrate that most closely matches the true substrate is selected. For substrates on top of substrates, such as plaster on concrete, the substrate directly beneath the paint surface is used. A testing combination is characterized by the room equivalent, component, and substrate. The testing location is a specific area on a testing combination where the XRF instrument measures for lead-based paint.

The following is a list of observations and findings documented during this evaluation.

- The Ceiling in the Kitchen under the drop ceiling tested positive for lead.
- The Window on the Porch tested positive for lead.
- The Windowsill on the Porch tested positive for lead.
- The Header on the Porch tested positive for lead.

Laboratory Results:

Six (6) water sample, four (4) soil samples, six (6) dust wipe samples, one (1) paint chip sample and fifty-nine (59) XRF readings were taken during the assessment. The analyses of the water, soil and dust wipe samples were performed by private laboratories. Copies of the results have been included with this report.

Water Sampling Procedure:

A one (1) liter sample is taken, in a proper container, from a faucet where the water has remained motionless in the line for a minimum of six (6) hours. The sample is given a unique identification number and this number is then entered on the chain-of-custody form which the inspector signs. A copy is retained and the original is sent to an accredited laboratory. Upon receipt, laboratory personnel verify the sample and chain-of-custody information match and then sign the form. A copy is retained by the laboratory and the signed original is returned with the results to the inspector.

Water Sample Laboratory Result:

The current West Virginia guideline for lead in drinking water is 15 ppb (parts per billion). The laboratory reported the following lead level in the water sample collected during this assessment:

Sample No.	Location	Pb ppb	Pos. > (15 ppb)	Neg. [1]
21Pb17005-W1	Kitchen Sink - cold	20.3	X	
21Pb17005-W2	Upstairs Bathroom Sink	15.5	X	
21Pb17005-W3	Kitchen Sink – Cold Initial	12.4		X
21Pb17005-W4	Kitchen Sink – Cold +30 sec	55.1	X	
21Pb17005-W5	Kitchen Sink – Cold +60 sec	11.5		X
21Pb17005-W6	Kitchen Sink – Cold +90 sec	6.9		X

[1] Lead may be present but not at a level of concern.

Additional water samples were taken by the Clarksburg Water Board after initial sample was above 15ppb. Samples were taken from the meter pit by Water Board employees.

Sample Date/Time	Location	Pb ppb	Pos. > (15 ppb)	Neg. [1]
5/12/2021 830	Meter Pit	30	X	
5/12/2021 850	Meter pit	21	X	
5/12/2021 920	Meter pit	8940	X	
5/12/2021	Blank	ND		X

Due to the Clarksburg Water Board's samples being above state limits for lead in water, the Environmental Engineering Division has been notified and will be conducting additional tests in the area. Additionally, the Clarksburg Water Board may conduct future testing in the area.

Soil Sampling Procedure:

The location of the soil sample site is first determined. The approximate locations where the subsamples will be collected are marked. Don a new pair of clean, disposable, non-powdered gloves. New gloves are donned before collecting each composite sample. A coring tool is driven into the soil surface to a depth of approximately two (2) inches. Excess soil is wiped away from the tool, using a gloved finger. Push out all the soil except the top ½ inch (1.3 cm) and place into a sample container with a tightly fitting cap. All other subsamples are collected and deposited into the same container. The sample container is labeled with a unique identification number and this number is then entered on the chain-of-custody form which the inspector signs.

Soil Sample Laboratory Result:

West Virginia guidelines specify that lead levels in bare, high contact play areas must be (less than) **<400 ppm** (parts per million) and (less than) <1200 ppm in bare soil in the remainder of the yard. The laboratory reported the following lead level in the soil sample collected during this assessment:

Sample No.	Location	Pb µg/g ppm	Pos. (≥400 ppm)	Neg. [1]
21Pb17005-S1	Backyard	**160**		X
21Pb17005-S2	Firepit	**82**		X
21Pb17005-S3	Next Door Lot	**29**		X
21Pb17005-S4	Flower Bed	**180**		X

Dust Wipe Sampling Procedure for Floors and Other Large Flat Surfaces:

The sample site (the area to be wiped) is identified. A clean template is placed on the sample area. A re-sealable container is prepared by partially unscrewing the cap on an unused container to be sure that it can be opened. A new pair of disposable gloves are donned. The wipe is taken from its package and inspected to make sure it is moist, clean, and free of fungus or other material. If it is acceptable, the wipe is placed at one corner of the area to be sampled with the wipe fully opened and flat on the surface. With the fingers together, the wipe is grasped between the thumb and the palm. The first wipe pass is made, side-to-side. Proceed to wipe side-to-side with as many "S"-like motions as are necessary to completely cover the entire sample area.

The second wipe pass is made, top-to-bottom. The wipe is folded in half with the contaminated side facing inward. Once folded, the wipe is placed in the top corner of the sample

area and pressed down firmly with the fingers. Proceed to wipe top-to-bottom with an "S"-like or "Z"-like motions.

The third wipe pass is around the perimeter of the sampled area. The wipe is folded in half again with the dust collection side inward. The wiping motion is repeated around the perimeter to collect any remaining dust in the corners of the wipe area.

The wipe sample is then folded with the contaminated side facing inward again and inserted aseptically (without touching anything else) into the sample container. The sample container is labeled with a unique identification number and this number is then entered on the chain-of-custody form which the inspector signs.

Dust Wipe Samples:

The West Virginia clearance standards for lead dust are <40 $\mu g/ft^2$ (micrograms per square foot) for floors and other interior horizontal surfaces, <250$\mu g/ft^2$ for interior window stools/sills, and <400 $\mu g/ft^2$ for window wells/troughs, exterior concrete, or other rough surfaces. The laboratory reported the following lead levels in the dust wipe samples collected during this assessment:

Sample No.	Location	Total Pb µg	Pb µg/ft²	Pos.	Neg. [1]
21Pb17005-DW1	Boots	8.86	35.4		
21Pb17005-DW2	Pants	36.0	144		
21Pb17005-DW3	Basket	5.98	5.98		
21Pb17005-DW4	Stairs	9.54	9.54		X
21Pb17005-DW5	Blinds	9.28	9.28		
21Pb17005-DW6	Blank				

[1]Lead may be present but not at a level of concern.

Dust wipes were taken on boots, pants, laundry basket and blinds. There is no standard comparison for these tests under EPA guidelines but test results did show traces of lead in the dust collected off of these items.

*Note that West Virginia Dust Wipe standards and Federal Dust Wipe standards are different at this time. Report uses West Virginia standards, but laboratory report uses Federal standard.

Paint Chip Analysis:

The West Virginia clearance standards for paint chip analysis are 0.50% by Weight, 5000 ppm (parts per million) or 1.0 mg/cm² (micrograms per square centimeter). The laboratory reported the following lead levels in the paint chip samples collected during this assessment:

Sample No.	Location	Pb (µg/g) ppm	% Pb by Wt.	Pos.	Neg. [1]
21Pb17005-PC1	Kitchen	6000	0.6	X	

[1] Lead may be present but not at a level of concern

Recommendations:

Wet-mop dusty surfaces at least once a week. Use three buckets, one for wash water, one for rinse water and one for dirty water. Always wring dirty water into the dirty water bucket. To prevent recontamination of cleaned surfaces, wash mops and rags thoroughly after each use. If this is not possible, or if you have already used the mops and rags several times, place them in plastic bags and dispose of them carefully. Wet mop floors and wash window wells often to get rid of lead dust, vacuuming can spread lead dust unless you use a 99.97% efficient HEPA filter bag in your vacuum.

Children can swallow lead or breathe lead contaminated dust if they play in dust or dirt and then put their fingers or toys in their mouth. Wash your own and your child's hands frequently to rinse off any dust or dirt, especially before meals, naps and bedtime. Keep children's fingernails clean and trimmed. Do not allow your child to put things other than food in their mouth.

Wash children's toys, bottles, and pacifiers often, and always wash them after they fall on the floor. Stuffed toys in particular accumulate dust and should be washed often.

Exposure to lead at your job site could cause you to bring lead dust home on your clothes, shoes, hair or skin. Clean or remove shoes before entering your home to avoid tracking in lead from soil. If possible, change your clothes and shoes before leaving the work area. After removing your clothes, wash them immediately, separately from other family laundry. Then run one empty cycle through the washer to rinse away any remaining lead dust. Shower and wash your hair right after finishing work to prevent spreading lead dust.

West Virginia public water supplies do not generally carry elevated lead levels. The amount of lead in water is contingent upon many factors such as pH, alkalinity, temperature, conditions of plumbing fixtures and pipe interiors, and the amount of time the water has remained stagnant in the pipes. Old plumbing fixtures and water meters with brass and/or bronze fittings sometimes contain lead and some old water pipes were made of lead. Although lead can leach into water at any temperature, the lead level in warm or hot water can be significantly higher. Always avoid using hot tap water for any potable uses such as drinking, cooking, brushing teeth, etc., and if you plan to filter lead out of your water with carbon, sand or cartridge filters, be sure such filters are

certified for lead removal. Finally, note that boiling your water tends to **increase**, rather than decrease or remove the lead level in water.

To prevent an elevated lead level in your potable (drinking) water by flushing the plumbing prior to the first draw of water from a faucet. After a period of non-use (such as over-night), allow the cold water to run until its temperature stabilizes, generally 30 to 60 seconds before using it for any potable purpose. This process purges stagnant water from the plumbing, carrying any accumulated impurities away with it. Also, when soldering plumbing connections, use only lead-free solder approved for potable water.

Lead-contaminated soil frequently results from leaded gasoline, as well as lead-based paint, and can present a serious environmental lead hazard. When children and pets play in lead-contaminated soil, lead dust can be brought into and spread throughout the house. Furthermore, when vegetables grown in lead-contaminated soil are eaten, lead poisoning may occur.

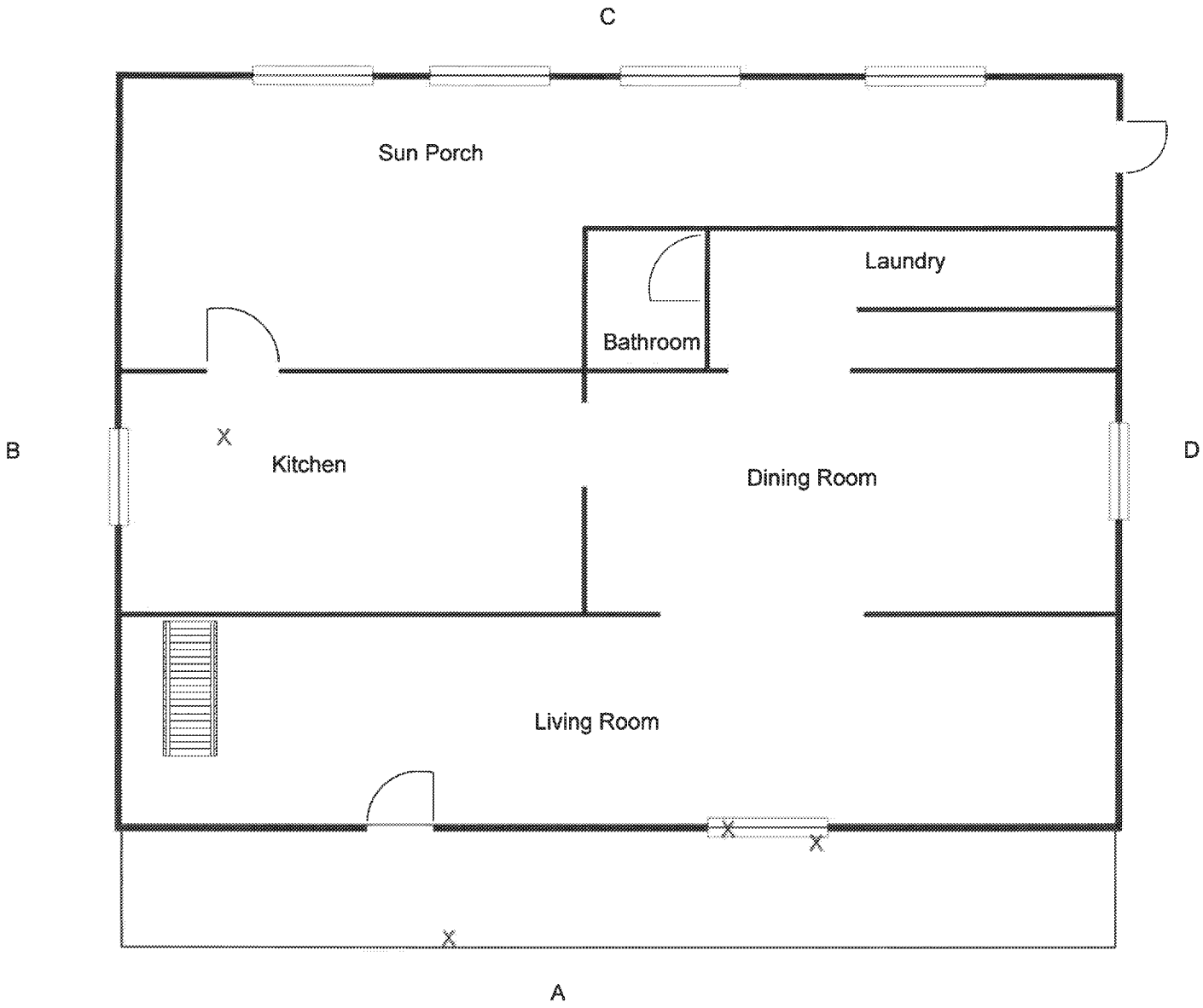
Lead is a cumulative poison, lead poisoning can happen slowly. The lead that is taken in daily, mounts up in the tissues, especially the bones. Although the laboratory result for the soil sample taken from the Backyard, 160 ug/g (ppm), is below the Federal guideline for lead in soil, 400 ug/g (ppm), daily exposure to lead-contaminated soil can result in an elevated blood lead level in small children.

Disclaimer

The environmental lead assessment conducted was not a lead risk assessment. XRF readings and/or samples collected during an assessment reflect the lead level of that particular area. Readings and samples are collected at random in accordance with established procedures to obtain a representative overview of lead levels within or around a housing unit. Therefore, it should not be construed that every surface or area in or around a housing unit was sampled or checked for lead content. Additional testing should be conducted if any home renovations are undertaken which may disturb surfaces which were not tested. This report is subject to the disclosure requirements developed under Section 1018 of the Residential Lead-based Paint Hazard Reduction Act of 1992 in Subpart E, "Residential Property Renovation."

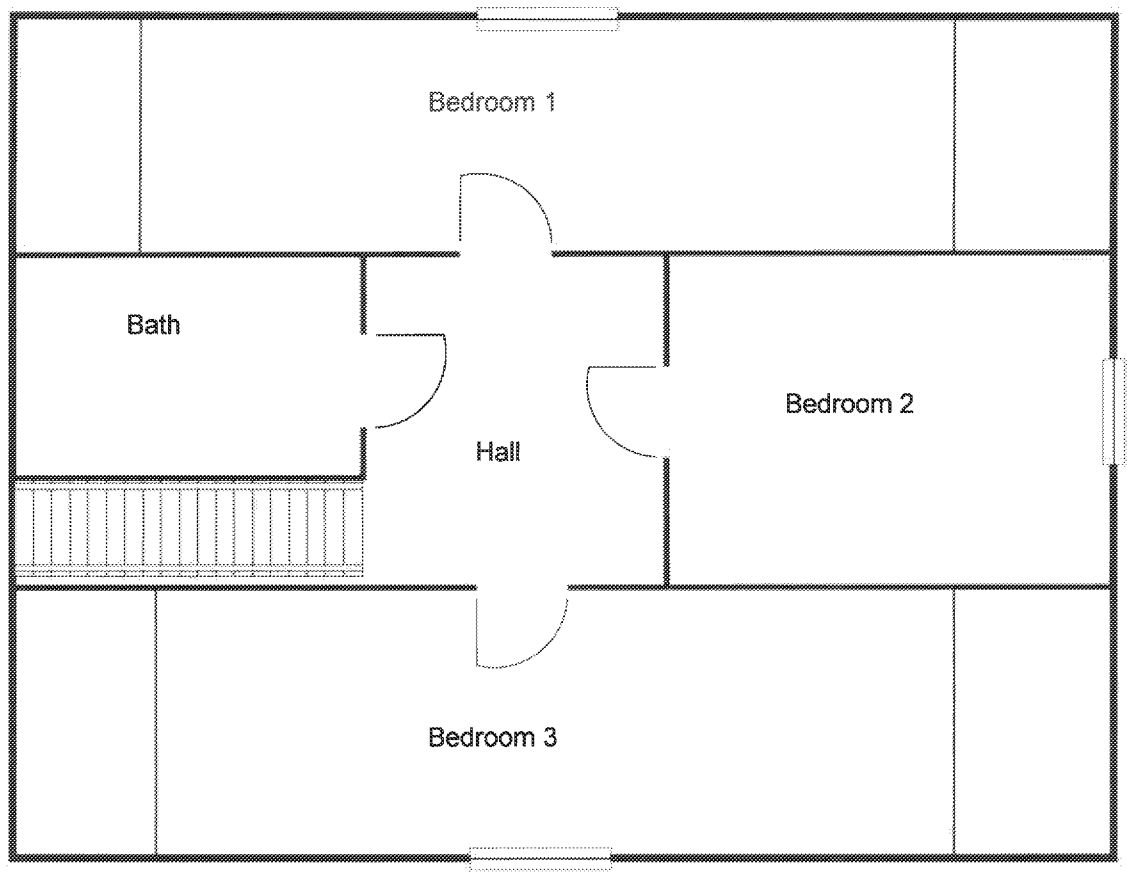
Ex. 6 Personal Privacy (PP)

First Floor



Second Floor

C



B

D

A

Time	Component	Substrate	Side	Inspector	Floor	Room	Results	PbK	Units
4/8/2021 12:33	calibrate						Negative	0.9	mg / cm ^2
4/8/2021 12:34	calibrate						Negative	0.9	mg / cm ^2
4/8/2021 12:35	calibrate						Positive	1	mg / cm ^2
4/8/2021 12:36	WALL	DRYWALL	A	ICE	FIRST	LIVING ROOM	Negative	< LOD	mg / cm ^2
4/8/2021 12:37	WALL	DRYWALL	B	ICE	FIRST	LIVING ROOM	Negative	< LOD	mg / cm ^2
4/8/2021 12:38	WALL	DRYWALL	D	ICE	FIRST	LIVING ROOM	Negative	< LOD	mg / cm ^2
4/8/2021 12:38	FIREPLACE	WOOD	C	ICE	FIRST	LIVING ROOM	Negative	< LOD	mg / cm ^2
4/8/2021 12:39	FIREPLACE	WOOD	C	ICE	FIRST	LIVING ROOM	Negative	< LOD	mg / cm ^2
4/8/2021 12:39	WINDOW	WOOD	A	ICE	FIRST	LIVING ROOM	Negative	< LOD	mg / cm ^2
4/8/2021 12:40	DOOR FRAME	WOOD	A	ICE	FIRST	LIVING ROOM	Negative	< LOD	mg / cm ^2
4/8/2021 12:41	WINDOW	WOOD	B	ICE	FIRST	LIVING ROOM	Negative	< LOD	mg / cm ^2
4/8/2021 12:42	TREAD	WOOD	C	ICE	FIRST	LIVING ROOM	Negative	< LOD	mg / cm ^2
4/8/2021 12:42	BANISTER	WOOD	C	ICE	FIRST	LIVING ROOM	Negative	< LOD	mg / cm ^2
4/8/2021 12:42	BANISTER	WOOD	C	ICE	FIRST	LIVING ROOM	Negative	< LOD	mg / cm ^2
4/8/2021 12:43	BANISTER	WOOD	C	ICE	FIRST	LIVING ROOM	Negative	< LOD	mg / cm ^2
4/8/2021 12:44	WALL	WOOD	A	ICE	FIRST	DINING ROOM	Negative	< LOD	mg / cm ^2
4/8/2021 12:44	DOOR FRAME	WOOD	A	ICE	FIRST	DINING ROOM	Negative	< LOD	mg / cm ^2
4/8/2021 12:45	WINDOW	WOOD	D	ICE	FIRST	DINING ROOM	Negative	< LOD	mg / cm ^2
4/8/2021 12:45	WINDOW	WOOD	D	ICE	FIRST	DINING ROOM	Negative	< LOD	mg / cm ^2
4/8/2021 12:45	WINDOW	WOOD	D	ICE	FIRST	DINING ROOM	Negative	< LOD	mg / cm ^2
4/8/2021 12:46	WINDOWWELL	WOOD	D	ICE	FIRST	DINING ROOM	Negative	< LOD	mg / cm ^2
4/8/2021 12:47	TRIM	WOOD	C	ICE	FIRST	DINING ROOM	Negative	< LOD	mg / cm ^2
4/8/2021 12:48	DOOR TRIM	WOOD	C	ICE	FIRST	DINING ROOM	Negative	< LOD	mg / cm ^2
4/8/2021 12:48	DESK	WOOD	B	ICE	FIRST	DINING ROOM	Negative	< LOD	mg / cm ^2
4/8/2021 12:49	DOOR	WOOD	B	ICE	FIRST	DINING ROOM	Negative	< LOD	mg / cm ^2
4/8/2021 12:50	WALL	WOOD	A	ICE	FIRST	KITCHEN	Negative	< LOD	mg / cm ^2
4/8/2021 12:50	DOOR	WOOD	A	ICE	FIRST	KITCHEN	Negative	< LOD	mg / cm ^2
4/8/2021 12:51	CABINET	WOOD	B	ICE	FIRST	KITCHEN	Negative	< LOD	mg / cm ^2
4/8/2021 12:51	WINDOW	WOOD	B	ICE	FIRST	KITCHEN	Negative	< LOD	mg / cm ^2
4/8/2021 12:52	DOOR	WOOD	C	ICE	FIRST	KITCHEN	Negative	< LOD	mg / cm ^2
4/8/2021 12:53	CEILING	WOOD	C	ICE	FIRST	KITCHEN	Positive	3.3	mg / cm ^2
4/8/2021 12:53	CEILING	WOOD	C	ICE	FIRST	KITCHEN	Negative	< LOD	mg / cm ^2
4/8/2021 12:56	WALL	DRYWALL	A	ICE	FIRST	LAUNDRY	Negative	< LOD	mg / cm ^2

Time	Component	Substrate	Side	Inspector	Floor	Room	Results	PbK	Units
4/8/2021 12:56	DOOR	DRYWALL	A	ICE	FIRST	LAUNDRY	Negative	< LOD	mg / cm ^2
4/8/2021 12:57	DOOR	WOOD	B	ICE	FIRST	LAUNDRY	Negative	< LOD	mg / cm ^2
4/8/2021 12:58	WALL	WOOD	C	ICE	FIRST	LAUNDRY	Negative	< LOD	mg / cm ^2
4/8/2021 13:00	CABINET	WOOD	D	ICE	FIRST	LAUNDRY	Negative	< LOD	mg / cm ^2
4/8/2021 13:01	WALL	WOOD	B	ICE	FIRST	SUNROOM	Negative	< LOD	mg / cm ^2
4/8/2021 13:02	WALL	WOOD	D	ICE	FIRST	SUNROOM	Negative	< LOD	mg / cm ^2
4/8/2021 13:07	WALL	DRYWALL	B	ICE	SECOND	HALL	Negative	< LOD	mg / cm ^2
4/8/2021 13:07	WALL	DRYWALL	D	ICE	SECOND	HALL	Negative	< LOD	mg / cm ^2
4/8/2021 13:08	WALL	DRYWALL	A	ICE	SECOND	BATHROOM	Negative	< LOD	mg / cm ^2
4/8/2021 13:08	WALL	DRYWALL	B	ICE	SECOND	BATHROOM	Negative	< LOD	mg / cm ^2
4/8/2021 13:09	WINDOW	PLASTER	B	ICE	SECOND	BATHROOM	Negative	< LOD	mg / cm ^2
4/8/2021 13:09	WALL	DRYWALL	C	ICE	SECOND	BATHROOM	Negative	< LOD	mg / cm ^2
4/8/2021 13:11	DOOR	WOOD	D	ICE	SECOND	BEDROOM 1	Negative	< LOD	mg / cm ^2
4/8/2021 13:12	CABINET	DRYWALL	D	ICE	SECOND	BEDROOM 1	Negative	< LOD	mg / cm ^2
4/8/2021 13:13	WALL	DRYWALL	A	ICE	SECOND	BEDROOM 2	Negative	< LOD	mg / cm ^2
4/8/2021 13:14	WALL	DRYWALL	B	ICE	SECOND	BEDROOM 2	Negative	< LOD	mg / cm ^2
4/8/2021 13:15	WINDOW	WOOD	D	ICE	SECOND	BEDROOM 2	Negative	< LOD	mg / cm ^2
4/8/2021 13:15	WINDOW	WOOD	D	ICE	SECOND	BEDROOM 2	Negative	< LOD	mg / cm ^2
4/8/2021 13:16	TRIM	WOOD	D	ICE	SECOND	BEDROOM 2	Negative	< LOD	mg / cm ^2
4/8/2021 13:18	WALL	DRYWALL	A	ICE	SECOND	BEDROOM 3	Negative	< LOD	mg / cm ^2
4/8/2021 13:18	FLOOR	WOOD	A	ICE	SECOND	BEDROOM 3	Negative	< LOD	mg / cm ^2
4/8/2021 13:21	FLOOR	WOOD	A	ICE	FIRST	PORCH	Negative	< LOD	mg / cm ^2
4/8/2021 13:21	WINDOW	WOOD	A	ICE	FIRST	PORCH	Positive	8	mg / cm ^2
4/8/2021 13:24	WINDOW SILL	WOOD	A	ICE	FIRST	PORCH	Positive	1.4	mg / cm ^2
4/8/2021 13:25	HEADER	WOOD	A	ICE	FIRST	PORCH	Positive	3.3	mg / cm ^2
4/8/2021 13:26	STONE	CONCRETE	A	ICE	FIRST	PORCH	Negative	< LOD	mg / cm ^2
4/8/2021 13:27	WINDOW	WOOD	A	ICE	FIRST	OUTSIDE	Negative	< LOD	mg / cm ^2
4/8/2021 13:27	WINDOW	WOOD	A	ICE	FIRST	OUTSIDE	Negative	< LOD	mg / cm ^2
4/8/2021 13:29	TABLE	WOOD	A	ICE	FIRST	OUTSIDE	Negative	< LOD	mg / cm ^2

Environmental Hazards Services, L.L.C.
7469 Whitepine Rd
Richmond, VA 23237
Telephone: 800.347.4010

Lead Dust Wipe Analysis Report

Report Number: 21-04-01919

Client: W. VA Bur. For Public Health
350 Capitol Street
Room 313
Charleston, WV 25301

Received Date: 04/12/2021
Analyzed Date: 04/15/2021
Reported Date: 04/15/2021

Project/Test Address: 21Pb17005 Bridge Street; Clarksburg, WV
Collection Date: 04/08/2021

Client Number:
106425

Laboratory Results

Fax Number:
304-558-0524

Lab Sample Number	Client Sample Number	Collection Location	Surface	Total Pb (ug)	Wipe Area (ft^2)	Concentration (ug/ft^2)	Narrative ID
21-04-01919-001	21PB17005-DW1	BOOTS		8.86	0.250	35.4	
21-04-01919-002	21PB17005-DW2	PANTS		36.0	0.250	144	
21-04-01919-003	21PB17005-DW3	BASKET		5.98	1.00	5.98	
21-04-01919-004	21PB17005-DW4	STAIRS	FL	9.54	1.00	9.54	
21-04-01919-005	21PB17005-DW5	BLINDS		9.28	1.00	9.28	
21-04-01919-006	21PB17005-DW6	BLANK		<5.00	--	----	

Environmental Hazards Services, L.L.C

Client Number: 106425 **Report Number:** 21-04-01919

Project/Test Address: 21Pb17005; 311 Bridge Street; Clarksburg, WV

Lab Sample Number	Client Sample Number	Collection Location	Surface	Total Pb (ug)	Wipe Area (ft^2)	Concentration (ug/ft^2)	Narrative ID

Method: ASTM E-1979-17/EPA SW846 7000B

Accreditation #:

Reviewed By Authorized Signatory: **Nonresponsive based on revised scope**

QA/QC Clerk

Lead Hazard and Clearance Standards Table

Description	EPA - Effective 12/2020	HUD Grant Programs
Hazard Standard, Floors	≥ 10 $\mu g/ft^2$	≥ 10 $\mu g/ft^2$
Hazard Standard, Sills	≥ 100 $\mu g/ft^2$	≥ 100 $\mu g/ft^2$
Clearance, Floors	< 10 $\mu g/ft^2$	< 10 $\mu g/ft^2$
Clearance, Sills	< 100 $\mu g/ft^2$	< 100 $\mu g/ft^2$
Clearance, Troughs	< 400 $\mu g/ft^2$	< 100 $\mu g/ft^2$
Clearance, Porch Floors	Not Regulated	< 40 $\mu g/ft^2$

The Reporting Limit (RL) is 5.00 ug Total Pb. Reported results are not corrected for field blanks. Dust wipe area and results are calculated based on area measurements determined by the client. All internal quality control requirements associated with this batch were met, unless otherwise noted.

The condition of the samples analyzed was acceptable upon receipt per laboratory protocol unless otherwise noted on this report. Results represent the analysis of samples submitted by the client. Sample location, description, area, etc., was provided by the client. Results reported above in ug/ft2 are calculated based on area supplied by the client. If the report does not contain the result for a field blank, it is due to the fact that the client did not include a field blank with their samples. EHS sample results do not reflect blank correction. This report shall not be reproduced except in full, without the written consent of the Environmental Hazards Services, L.L.C.

ELLAP Accredtitation through AIHA-LAP, LLC (100420), NY ELAP #11714.

Legend	ug = microgram	ug/ft^2 = micrograms per square foot	Pb = lead
	mL = milliliter	ft^2 = square foot	

21-04-01919

Lead Chain-of-Custody

EHS Laboratories™

Due Date: 04/15/2021 (Thursday) W

KH

Environmental Hazards Services, LLC

www.leadlab.com
(800) 347-4010
(804) 275-4907 (fax)

7469 Whitepine Rd
Richmond, VA
23237

Company Name: West Virginia Bureau for Public Health Address: 350 Capitol Street, Room 313 City/State/Zip: Charleston, WV 25301

Phone: (304) 356-4271 Fax: (304) 588-0524 E-mail: Paul.D.Ice@wv.gov Acct. Number: 106425

Project Name / Testing Address: 21Pb17005 - Bridge Street City/State (Required): Clarksburg, WV

Collected by: Paul Ice Certification Number: 7320120009 Purchase Order Number:

* Do wipe samples submitted meet ASTM E1792 requirements? Yes ☑ No ☐

Turn Around Time (TAT)

☐ 1-Day ☑ 3-Day

☐ Same Day (Must Call Ahead)

☐ Weekend (Must Call Ahead)

If no TAT is specified, sample(s) will be processed and charged as 3-Day TAT.

Sample Type

Single Dust Wipe = DW Soil = S
Paint Chip = PC Air = A
Composite Soil = CS

Abbreviations

FR	= Family Room	F	= Front	0	= Basement
LR	= Living Room	R	= Rear	KT	= Kitchen
DN	= Den	LT	= Left	BA	= Bath
DR	= Dining Room	RT	= Right	BR	= Bedroom
1	= 1st Fl	2	= 2nd Fl		

Surface Type for Dust Wipe

FL = Floor
CP = Carpet
SL = Window Sill
WW = Window Well

No.	Sample Type	Date Collected	Client Sample ID	Collection Location (LR, KT, LTFBR, RTRBR, etc.)	Surface Type	Area Length X Width in inches (Provide paint chip area only if requesting mg/cm2)	Paint Chip mg/cm²	Paint Chip PPM	Paint Chip %	Air Flow Rate (L/ min)	Air Total Time (minutes)	Air Volume (Total Liters)	Comments
1	DW	4/8/2021	21Pb17005-DW1	Boots		2 X 18							
2	DW	4/8/2021	21Pb17005-DW2	Pants		2 X 18							
3	DW	4/8/2021	21Pb17005-DW3	Basket		12 X 12							
4	DW	4/8/2021	21Pb17005-DW4	Stairs	FL	12 X 12							
5	DW	4/8/2021	21Pb17005-DW5	Blinds		12 X 12							
6	DW	4/8/2021	21Pb17005-DW6	Blank		X							
7						X							
8						X							
9						X							
10						X							

Released by: Paul Ice Signature: Date/Time: 4/12/21 945

Received by: Nonresponsive based on revised scope Signature: Nonresponsive based on revised scope Date/Time: 4/12/21 4:00 pm

Form 5.4a Field Sampling Form for Dust. (Single-Surface Sampling)

(Use a separate form for each housing unit, common area, or exterior. Sample all layers of paint, not just deteriorated paint layers.) Page ____ of ____

Property address: [redacted] Blue Street Clarksburg WV

Name of property owner: Ex. 6 Personal Privacy (PP) Apt. No. _____ Common Area, Housing Unit, or Exterior No.: _____

Name/Firm of risk assessor: Paul Ice Date of assessment: 4/8/21

Sample Number	Room or Entryway	Surface Type[1]	Exact Location of Wipe Sample	Is surface smooth & cleanable?	Sample Area[2] (inches x inches)	Sample Area[3] (ft^2)	Lab Result[4] ($\mu g/ft^2$)	Notes
21PB170005-DW1	LR		Butts	Y	2 x 18			
21PB170005-DW2	Laundry		Pots	Y	2 x 18			
21PB170005-DW3	Laundry		Basket	Y	12 x 12			
21PB170005-DW4	LR	HF	Stairs	Y	12 x 12			
21PB170005-DW5	Br 2		Blinds	Y	~~12~~ x ~~18~~ 12			
21PB170005-Blank	Blank				x			
					x			
					x			
					x			
					x			

[1]Hard Floor (HF), Carpeted Floor (CF), or Interior Window Sill (S)

[2]Measure to the nearest 1/8th or 1/10th of an inch. [1/8 = 0.125, 2/8 = 0.25, 3/8 = 0.375, 4/8 = 0.5, 5/8 = 0.625, 6/8 = 0.75, 7/8 = 0.875]

[3]Calculate sample area in square feet as follows: Calculate square inches, then divide by 144.

[4]Provide areas, direct laboratory to report the dust lead result in $\mu g/ft^2$.

NOTE: EPA standards: 40 $\mu g/ft^2$ (interior floors); 250 $\mu g/ft^2$ (interior window sills) for Risk Assessment; 25 $\mu g/ft^2$ and 125 $\mu g/ft^2$ for screen.

Total number of samples on this page: 6 Date of sample collection: 4/8/21

Shipped to lab by: [signature] 4/9/21 (signature and date)

Received by: _____ __/__/____ Reviewed by: _____ __/__/____

Date results reported by lab: __/__/____ Reviewed by: _____

Environmental Hazards Services, L.L.C.
7469 Whitepine Rd
Richmond, VA 23237
Telephone: 800.347.4010

Lead in Soil Analysis Report

Report Number: 21-04-01923

Client: W. VA Bur. For Public Health
350 Capitol Street
Room 313
Charleston, WV 25301

Received Date: 04/12/2021
Analyzed Date: 04/15/2021
Reported Date: 04/15/2021

Project/Test Address: 21Pb17005; Bridge Street; Clarksburg, WV
Collection Date: 04/08/2021

Client Number:
106425

Laboratory Results

Fax Number:
304-558-0524

Lab Sample Number	Client Sample Number	Collection Location	Concentration ppm (ug/g)	Narrative ID
21-04-01923-001	21PB17005-S1	BACK YARD	160	
21-04-01923-002	21PB17005-S2	FIREPIT	82	
21-04-01923-003	21PB17005-S3	LOT	29	
21-04-01923-004	21PB17005-S4	FLOWER BED	180	

Environmental Hazards Services, L.L.C

Client Number: 106425 **Report Number:** 21-04-01923

Project/Test Address: 21Pb17005; [redacted] Bridge Street; Clarksburg, WV

Lab Sample Number	Client Sample Number	Collection Location	Concentration ppm (ug/g)	Narrative ID

Method: ASTM E-1979-17/EPA SW846 7000B

Reviewed By Authorized Signatory: **Nonresponsive based on revised scope**

QA/QC Clerk

The Federal lead guidelines for lead in soil is 400 ug/g (ppm) in play areas, and 1200 ug/g (ppm) in bare soil in the remainder of the yard. The Reporting Limit (RL) is 10.0 ug Total Pb. All internal quality control requirements associated with this batch were met, unless otherwise noted.

The condition of the samples analyzed was acceptable upon receipt per laboratory protocol unless otherwise noted on this report. Results represent the analysis of samples submitted by the client. Unless otherwise noted, samples are reported without a dry weight correction. Sample location, description, area, volume, etc., was provided by the client. If the report does not contain the result for a field blank, it is due to the fact that the client did not include a field blank with their samples. EHS sample results do not reflect blank correction. This report shall not be reproduced except in full, without the written consent of the Environmental Hazards Service, L.L.C.

ELLAP Accreditation through AIHA-LAP, LLC (100420), NY ELAP #11714.

LEGEND	ug = microgram	ppm = parts per million
	ug/g = micrograms per gram	

EHS Laboratories

Environmental Hazards Services, L.L.C.
7469 Whitepine Rd
Richmond, VA 23237
Telephone: 800.347.4010

Lead Paint Chip Analysis Report

Report Number: 21-04-01923

Client: W. VA Bur. For Public Health
350 Capitol Street
Room 313
Charleston, WV 25301

Received Date: 04/12/2021
Analyzed Date: 04/14/2021
Reported Date: 04/15/2021

Project/Test Address: 21Pb17005[redacted] Bridge Street; Clarksburg, WV
Collection Date: 04/08/2021

Client Number: 106425

Laboratory Results

Fax Number: 304-558-0524

Lab Sample Number	Client Sample Number	Collection Location	Pb (ug/g) ppm	% Pb by Wt.	Narrative ID
21-04-01923-005	21PB17005-PC1	KITCHEN	6000	0.60	

Preparation Method: ASTM E-1979-17
Analysis Method: EPA SW846 7000B

Reviewed By Authorized Signatory: **Nonresponsive based on revised scope**

QA/QC Clerk

The HUD lead guidelines for lead paint chips are 0.50% by Weight, 5000 ppm, or 1.0 mg/cm². The Reporting Limit (RL) for samples prepared by ASTM E-1979-17 is 10.0 ug Total Pb. The RL for samples prepared by EPA SW846 3050B is 25.0 ug Total Pb. Paint chip area and results are calculated based on area measurements determined by the client. All internal quality control requirements associated with this batch were met, unless otherwise noted.

The condition of the samples analyzed was acceptable upon receipt per laboratory protocol unless otherwise noted on this report. Results represent the analysis of samples submitted by the client. Sample location, description, area, etc., was provided by the client. Results reported above in mg/cm3 are calculated based on area supplied by client. This report shall not be reproduced except in full, without the written consent of the Environmental Hazards Service, L.L.C.

ELLAP Accreditation through AIHA-LAP, LLC (100420), NY ELAP #11714.

LEGEND	Pb= lead	ug = microgram	ppm = parts per million
	ug/g = micrograms per gram	Wt. = weight	

21-04-01923

Due Date:
04/15/2021
(Thursday)
W

EHS Laboratories™

Lead Chain-of-Custody

Environmental Hazards Services, LLC

www.leadlab.com
(800) 347-4010
(804) 275-4907 (fax)

7469 Whitepine Rd
Richmond, VA
23237

Company Name: West Virginia Bureau for Public Health Address: 350 Capitol Street, Room 313 City/State/Zip: Charleston, WV 25301

Phone: (304) 356-4271 Fax: (304) 588-0524 E-mail: Paul.D.Ice@wv.gov Acct. Number: 106425

Project Name / Testing Address: 21Pb17005[redacted] Bridge Street City/State (Required): Clarksburg, WV

Collected by: Paul Ice Certification Number: 7320120009 Purchase Order Number:

*** Do wipe samples submitted meet ASTM E1792 requirements?** Yes ☑ No ☐

Turn Around Time (TAT)
☐ 1-Day ☑ 3-Day
☐ Same Day (Must Call Ahead)
☐ Weekend (Must Call Ahead)
If no TAT is specified, sample(s) will be processed and charged as 3-Day TAT.

Sample Type
Single Dust Wipe = DW Soil = S
Paint Chip = PC Air = A
Composite Soil = CS

Abbreviations
FR = Family Room F = Front B = Basement
LR = Living Room R = Rear KT = Kitchen
DN = Den LT = Left BA = Bath
DR = Dining Room RT = Right BR = Bedroom
1 = 1st Fl 2 = 2nd Fl

Surface Type for Dust Wipe
FL = Floor
CP = Carpet
SL = Window Sill
WW = Window Well

No.	Sample Type	Date Collected	Client Sample ID	Collection Location (LR, KT, LTFBR, RTRBR, etc.)	Surface Type	Area: Length X Width in inches (Provide paint chip area only if requesting mg/cm2)	Paint Chip: mg/cm²	Paint Chip: PPM	Paint Chip: %	Air: Flow Rate (L/ min)	Air: Total Time (minutes)	Air: Volume (Total Liters)	Comments
1	S	4/8/2021	21Pb17005-S1	Back Yard		X							
2	S	4/8/2021	21Pb17005-S2	Firepit		X							
3	S	4/8/2021	21Pb17005-S3	Lot		X							
4	S	4/8/2021	21Pb17005-S4	Flower Bed		X							
5	PC	4/8/2021	21Pb17005-PC1	Kitchen		X		X					
6						X							
7						X							
8						X							
9						X							
10						X							

Released by: Paul Ice Signature: [signature] Date/Time: 4/12 3:15

Received by: Nonresponsive based on revised scope Signature: Nonresponsive based on revised scope Date/Time: 4/12/21 4:18 p

Form 5.5 Field Sampling Form for Soil.
(Composite sampling only. Use a separate form for each residential building in a multi-building property.)

Property address: [redacted] Bridge St Clarksburg WV Bldg. or Apt. No. _____

Name of property owner: Ex. 6 Personal Privacy (PP)

Name of risk assessor: Paul Ie

Type of Area Sampled	Sample Number	Location of Composite Sample(s)	Approximate Area of Bare Soil Represented by Composite Sample (ft.²)	Laboratory Result (ppm or µg/g)
Bare Soil in Play Areas	210617005 -S4	Flower bed		
Bare Soil in Non-play Areas in Dripline/ Foundation Area				
Bare Soil in Non-play Areas in the Rest of the Yard				
Weighted average of soil-lead concentration in non-play areas of dripline/foundation areas and the rest of the yard:				

NOTE: EPA hazard standard for bare play area soil is 400 ppm or µg/g; for bare non-play area soil is 1,200 ppm or µg/g.

Total number of samples on this page: 1 Date of sample collection: 4/8/21

Shipped to lab by: PS 4/9/21 (signature and date) Received by: _____ __/__/____

Reviewed by: _____ __/__/____

Date results reported by lab: __/__/____ Reviewed by: _____ __/__/____

Form 5.5 Field Sampling Form for Soil.
(Composite sampling only. Use a separate form for each residential building in a multi-building property.)

Property address: [redacted] Burke Street Clarksburg WV Bldg. or Apt. No. _____

Name of property owner: Ex. 6 Personal Privacy (PP)

Name of risk assessor Paul Imse

Type of Area Sampled	Sample Number	Location of Composite Sample(s)	Approximate Area of Bare Soil Represented by Composite Sample ($ft.^2$)	Laboratory Result (ppm or µg/g)
Bare Soil in Play Areas	21PB17005 -S1	Back Yard		
Bare Soil in Non-play Areas in Dripline/ Foundation Area	21PB17005 -S2	Front yard		
Bare Soil in Non-play Areas in the Rest of the Yard	21PB17005 -S3	Lot		
Weighted average of soil-lead concentration in non-play areas of dripline/foundation areas and the rest of the yard:				

NOTE: EPA hazard standard for bare play area soil is 400 ppm or µg/g; for bare non-play area soil is 1,200 ppm or µg/g.

Total number of samples on this page: 3 Date of sample collection: 4/8/21

Shipped to lab by: [signature] 4/9/21 (signature and date) Received by: _____ __/__/____

Reviewed by: _____ __/__/____

Date results reported by lab: __/__/____ Reviewed by: _____ __/__/____

Form 5.3 Field Paint Chip Sampling Form.

(Use a separate form for each housing unit, common area, or exterior. Sample all layers of paint, not just deteriorated paint layers.) **Page** 1 **of** 1

Property address: [redacted] Bridge ST. Clarksburg WV Name of property owner: Ex. 6 Personal Privacy (PP)

Apt. No. ______ Common Area, Housing Unit, or Exterior: ______

Name of risk assessor: Paul Ie Date of assessment: 4/8/21

Sample Number	Location	Room Equivalent	Building Component	Size of Sample (cm x cm)*	Lead (mg/cm²)	Lead (µg/g)	Notes
21B17445-PC1	Kitchen	Ceiling				X	
Federal standard:					**1.0**	**5,000**	

**Samples submitted to the laboratory for analysis must include the area in square centimeters for the result to be reported as mg/cm².*

Total number of samples on this page: 1

Date of sample collection: 4/8/21 Date shipped to lab: 4/9/21 Shipped by: [signature] (signature)

Received by: ______ (signature and date) Reviewed by: ______ (signature and date)

Date results reported (by lab): ___/___/___ Reviewed by: ______ (signature and date)

WVDHHR/BPH - Office of Laboratory Services
Environmental Chemistry Laboratory
4710 Chimney Drive Suite G
Charleston, WV 25302
Ph. 304-965-2694

Laboratory Analytical Report

Final Report

Folder #: E21W005179
Date Received: 04/09/2021
Purpose: Lead Assessment

Submitter:
Client ID: 1915
OFFICE OF ENVIRONMENTAL HEALTH SERVICES
Kanawha
350 CAPITOL STREET ROOM 313
CHARLESTON, WV 25301

Sample #: E21W005179-001
Collected By: PAUL ICE
Collection Point: KITCHEN SINK COLD
21Pb17005-W1

Fluoride Plant Result:
Lead/Copper (First Draw) Water Last Used: 04/07/2021 23:00

Chain of Custody: N
Date Collected: 04/08/2021
Time Collected: 12:05
Comments:

Test	Results	Qualifier	Test Method	MCL (SMCL)	MRL	MDL	Date/Time Tested	Tested By
Lead	20.3 ug/L		EPA 200.8	15 ug/L	1 ug/L	0.329 ug/L	05/06/2021 10:02	Gregory Young

MCL = Maximum Contaminant Level **SMCL** = Secondary Maximum Contaminant Level **MRL** = Minimum Reporting Level **MDL** = Method Detection Limit

Approved By: Matthew Keaton **Date Reported:** 05/07/2021

OFFICE OF ENVIRONMENTAL HEALTH SERVICES
Attention To: JUDY ASHCRAFT
350 CAPITOL STREET ROOM 313
CHARLESTON, WV 25301

WVDHHR/BPH - Office of Laboratory Services
Environmental Chemistry Laboratory
4710 Chimney Drive Suite G
Charleston, WV 25302
Ph. 304-965-2694

Laboratory Analytical Report

Final Report

Folder #: E21W005296
Date Received: 05/20/2021
Purpose: Lead Assessment

Submitter:
Client ID: 1915
OFFICE OF ENVIRONMENTAL HEALTH SERVICES
Kanawha
350 CAPITOL STREET ROOM 313
CHARLESTON, WV 25301

Sample #: E21W005296-001
Collected By: PAUL ICE
Collection Point: BATHROOM SINK UPSTAIRS COLD 21Pb17005-W2

Fluoride Plant Result:
Lead/Copper (First Draw) Water Last Used: 05/19/2021 22:00

Chain of Custody: N
Date Collected: 05/20/2021
Time Collected: 09:37
Comments:

Test	Results	Qualifier	Test Method	MCL (SMCL)	MRL	MDL	Date/Time Tested		Tested By
Lead	15.5 ug/L		EPA 200.8	15 ug/L	1 ug/L	0.329 ug/L	06/02/2021	11:44	Gregory Young

MCL = Maximum Contaminant Level SMCL = Secondary Maximum Contaminant Level MRL = Minimum Reporting Level MDL = Method Detection Limit

Approved By: Matthew Keaton **Date Reported:** 06/04/2021

OFFICE OF ENVIRONMENTAL HEALTH SERVICES
Attention To: JUDY ASHCRAFT
350 CAPITOL STREET ROOM 313
CHARLESTON, WV 25301

WVDHHR/BPH - Office of Laboratory Services
Environmental Chemistry Laboratory
4710 Chimney Drive Suite G
Charleston, WV 25302
Ph. 304-965-2694

Laboratory Analytical Report

Final Report

Folder #: E21W005295
Date Received: 05/20/2021
Purpose: Lead Assessment

Submitter:
Client ID: 1915
OFFICE OF ENVIRONMENTAL HEALTH SERVICES
Kanawha
350 CAPITOL STREET ROOM 313
CHARLESTON, WV 25301

Sample #: E21W005295-001
Collected By: PAUL ICE
Collection Point: KITCHEN SINK COLD
21Pb17005-W3

Fluoride Plant Result:
Lead/Copper (First Draw) Water Last Used: 05/19/2021 22:00

Chain of Custody: N
Date Collected: 05/20/2021
Time Collected: 09:41
Comments: INITIAL SAMPLE

Test	Results	Qualifier	Test Method	MCL (SMCL)	MRL	MDL	Date/Time Tested		Tested By
Lead	12.4 ug/L		EPA 200.8	15 ug/L	1 ug/L	0.329 ug/L	06/02/2021	11:44	Gregory Young

MCL = Maximum Contaminant Level SMCL = Secondary Maximum Contaminant Level MRL = Minimum Reporting Level MDL = Method Detection Limit

Approved By: Matthew Keaton **Date Reported:** 06/04/2021

OFFICE OF ENVIRONMENTAL HEALTH SERVICES
Attention To: JUDY ASHCRAFT
350 CAPITOL STREET ROOM 313
CHARLESTON, WV 25301

WVDHHR/BPH - Office of Laboratory Services
Environmental Chemistry Laboratory
4710 Chimney Drive Suite G
Charleston, WV 25302
Ph. 304-965-2694

Laboratory Analytical Report

Final Report

Folder #: E21W005303
Date Received: 05/20/2021
Purpose: Lead Assessment

Submitter:
Client ID: 1915
OFFICE OF ENVIRONMENTAL HEALTH SERVICES
Kanawha
350 CAPITOL STREET ROOM 313
CHARLESTON, WV 25301

Sample #: E21W005303-001
Collected By: PAUL ICE
Collection Point: KITCHEN SINK COLD
21Pb17005-W4

Fluoride Plant Result:
Lead/Copper (First Draw) Water Last Used: 05/19/2021 22:00

Chain of Custody: N
Date Collected: 05/20/2021
Time Collected: 09:41
Comments: 30 SEC

Test	Results	Qualifier	Test Method	MCL (SMCL)	MRL	MDL	Date/Time Tested		Tested By
Lead	55.1 ug/L		EPA 200.8	15 ug/L	1 ug/L	0.329 ug/L	06/02/2021	11:44	Gregory Young

MCL = Maximum Contaminant Level **SMCL** = Secondary Maximum Contaminant Level **MRL** = Minimum Reporting Level **MDL** = Method Detection Limit

Approved By: Matthew Keaton
Date Reported: 06/04/2021

OFFICE OF ENVIRONMENTAL HEALTH SERVICES
Attention To: JUDY ASHCRAFT
350 CAPITOL STREET ROOM 313
CHARLESTON, WV 25301

WVDHHR/BPH - Office of Laboratory Services
Environmental Chemistry Laboratory
4710 Chimney Drive Suite G
Charleston, WV 25302
Ph. 304-965-2694

Laboratory Analytical Report

Final Report

Folder #: E21W005304
Date Received: 05/20/2021
Purpose: Lead Assessment

Submitter:
Client ID: 1915
OFFICE OF ENVIRONMENTAL HEALTH SERVICES
Kanawha
350 CAPITOL STREET ROOM 313
CHARLESTON, WV 25301

Sample #: E21W005304-001
Collected By: PAUL ICE
Collection Point: KITCHEN SINK COLD
21Pb17005-W5

Fluoride Plant Result:
Lead/Copper (First Draw) Water Last Used: 05/19/2021 22:00

Chain of Custody: N
Date Collected: 05/20/2021
Time Collected: 09:42
Comments: 60 SEC

Test	Results	Qualifier	Test Method	MCL (SMCL)	MRL	MDL	Date/Time Tested		Tested By
Lead	11.5 ug/L		EPA 200.8	15 ug/L	1 ug/L	0.329 ug/L	06/02/2021	11:44	Gregory Young

MCL = Maximum Contaminant Level **SMCL** = Secondary Maximum Contaminant Level **MRL** = Minimum Reporting Level **MDL** = Method Detection Limit

Approved By: Matthew Keaton **Date Reported:** 06/04/2021

OFFICE OF ENVIRONMENTAL HEALTH SERVICES
Attention To: JUDY ASHCRAFT
350 CAPITOL STREET ROOM 313
CHARLESTON, WV 25301

WVDHHR/BPH - Office of Laboratory Services
Environmental Chemistry Laboratory
4710 Chimney Drive Suite G
Charleston, WV 25302
Ph. 304-965-2694

Laboratory Analytical Report

Final Report

Folder #: E21W005297
Date Received: 05/20/2021
Purpose: Lead Assessment

Submitter:
Client ID: 1915
OFFICE OF ENVIRONMENTAL HEALTH SERVICES
Kanawha
350 CAPITOL STREET ROOM 313
CHARLESTON, WV 25301

Sample #: E21W005297-001
Collected By: PAUL ICE
Collection Point: KITCHEN SINK COLD
21Pb17005-W6

Fluoride Plant Result:
Lead/Copper (First Draw) Water Last Used: 05/19/2021 22:00

Chain of Custody: N
Date Collected: 05/20/2021
Time Collected: 09:43
Comments: 90 SEC

Test	Results	Qualifier	Test Method	MCL (SMCL)	MRL	MDL	Date/Time Tested		Tested By
Lead	6.9 ug/L		EPA 200.8	15 ug/L	1 ug/L	0.329 ug/L	06/02/2021	11:44	Gregory Young

MCL = Maximum Contaminant Level **SMCL** = Secondary Maximum Contaminant Level **MRL** = Minimum Reporting Level **MDL** = Method Detection Limit

Approved By: Matthew Keaton **Date Reported:** 06/04/2021

OFFICE OF ENVIRONMENTAL HEALTH SERVICES
Attention To: JUDY ASHCRAFT
350 CAPITOL STREET ROOM 313
CHARLESTON, WV 25301

Performance Characteristic Sheet

EFFECTIVE DATE: **September 24, 2004** **EDITION NO.: 1**

MANUFACTURER AND MODEL:

Make: *Niton LLC*
Tested Model: *XLp 300*
Source: ^{109}Cd
Note: This PCS is also applicable to the equivalent model variations indicated below, for the Lead-in-Paint K+L variable reading time mode, in the XLi and XLp series:

XLi 300A, XLi 301A, XLi 302A and XLi 303A.
XLp 300A, XLp 301A, XLp 302A and XLp 303A.
XLi 700A, XLi 701A, XLi 702A and XLi 703A.
XLp 700A, XLp 701A, XLp 702A and XLp 703A.

Note: The XLi and XLp versions refer to the shape of the handle part of the instrument. The differences in the model numbers reflect other modes available, in addition to Lead-in-Paint modes. The manufacturer states that specifications for these instruments are identical for the source, detector, and detector electronics relative to the Lead-in-Paint mode.

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

Lead-in-Paint K+L variable reading time mode.

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm^2 (inclusive)

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm^2 in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm^2 film).

If readings are outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instruments into control before XRF testing proceeds.

SUBSTRATE CORRECTION:

For XRF results using Lead-in-Paint K+L variable reading time mode, substrate correction is <u>not</u> needed for:

Brick, Concrete, Drywall, Metal, Plaster, and Wood

INCONCLUSIVE RANGE OR THRESHOLD:

K+L MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm^2)
Results not corrected for substrate bias on any substrate	Brick	1.0
	Concrete	1.0
	Drywall	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown on this sheet are calculated from the EPA/HUD evaluation using archived building components. Testing was conducted in August 2004 on 133 testing combinations. The instruments that were used to perform the testing had new sources; one instrument's was installed in November 2003 with 40 mCi initial strength, and the other's was installed June 2004 with 40 mCi initial strength.

OPERATING PARAMETERS:

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

SUBSTRATE CORRECTION VALUE COMPUTATION:

Substrate correction is not needed for brick, concrete, drywall, metal, plaster or wood when using Lead-in-Paint K+L variable reading time mode, the normal operating mode for these instruments. If substrate correction is desired, refer to Chapter 7 of the HUD Guidelines for guidance on correcting XRF results for substrate bias.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing. Use the K+L variable time mode readings.

Conduct XRF retesting at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family and multifamily housing, a result is defined as a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF results.

Compute the average of all ten re-test XRF results.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If

the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

For the Lead-in-Paint K+L variable reading time mode, the instrument continues to read until it is moved away from the testing surface, terminated by the user, or the instrument software indicates the reading is complete. The following table provides testing time information for this testing mode. The times have been adjusted for source decay, normalized to the initial source strengths as noted above. Source strength and type of substrate will affect actual testing times. At the time of testing, the instruments had source strengths of 26.6 and 36.6 mCi.

Testing Times Using K+L Reading Mode (Seconds)

	All Data			Median for laboratory-measured lead levels (mg/cm^2)		
Substrate	25^{th} Percentile	Median	75^{th} Percentile	Pb < 0.25	0.25 ≤ Pb<1.0	1.0 ≤ Pb
Wood Drywall	4	11	19	11	15	11
Metal	4	12	18	9	12	14
Brick Concrete Plaster	8	16	22	15	18	16

CLASSIFICATION RESULTS:

XRF results are classified as positive if they are greater than or equal to the threshold, and negative if they are less than the threshold.

DOCUMENTATION:

A document titled *Methodology for XRF Performance Characteristic Sheets* provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. For a copy of this document call the National Lead Information Center Clearinghouse at 1-800-424-LEAD.

This XRF Performance Characteristic Sheet was developed by the Midwest Research Institute (MRI) and QuanTech, Inc., under a contract between MRI and the XRF manufacturer. HUD has determined that the information provided here is acceptable when used as guidance in conjunction with Chapter 7, Lead-Based Paint Inspection, of HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*.

The EI Group, Inc.

This certifies that

Paul Icé

Student Address: 305 Capitol Street, Room 313, Charleston, WV 25301

Has attended and satisfactorily passed an examination
covering the contents of an approved course titled

VT Lead Risk Assessor Refresher (8-Hour) - VA only

7320120009
Certificate Number

Ex. 6 Personal Privacy (PP)
Social Security Number

December 3, 2020
Course Date

December 3, 2020
Exam Date

December 3, 2023
Expiration Date

4186 Innslake Drive
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EPA Approved Under
Title X

Online
Location

Phillip Fincher, Training Program Manager

Jeffrey Joseph Tinaglia, Primary Instructor

3331001570
Course Approval Number